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10/718,921

11/21/2003

Michael Shu-Huan Wang

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EXAMINER

MCDONALD, SHANTESE L

ART UNIT

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3723

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/718,921
Filing Date: November 21, 2003
Appellant(s): WANG ET AL.

Jay M. Cantor
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1/11/08 appealing from the Office action mailed 12/18/07.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,482,290	Cheng et al.	11-2002
6,702,651	Tolles	3-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. in view of Tolles.

Cheng et al. teaches a method for imparting relative motion to a polishing pad wherein the polishing pad is rotated about a center axis which is perpendicular to the polishing surface of the polishing pad, and dispensing a material to the most center portion of the polishing surface and including the axis, and further dispensing the material from the dispensing arm to the polishing pad all along an area from the circumference of the polishing pad to the axis, (col. 7, lines 14-45). Cheng et al. teaches all the limitations of the claims except for the material being a wash solution comprising de-ionized water. Tolles teaches dispensing a slurry or wash solution comprising de-ionized water on a polishing pad, (col. 8, lines 31-32). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the invention of Cheng et al. with the a wash solution comprising de-ionized water, as taught by Tolles in order to enhance the pad cleaning capabilities, and since it is known in the art that a slurry dispense arm is capable to dispense either a slurry or a wash solution.

Allowable Subject Matter

Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

(10) Response to Argument

The Applicant argues that Cheng et al. reference dispenses the slurry in a half-circular path, and never provides the step of dispensing a wash material all along the

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surface to the most center portion while the pad is rotating. The Examiner disagrees.

The Examiner notes that Cheng does teach dispensing the slurry in a half-circular pattern, (col.7, lines 23), but that the half circular motion is the motion of the dispensing wheel, 70, and that the dispensing wheel is rotating in a half circular pattern while the push arm is moving across the polishing pad, and therefore the slurry is dispensed uniformly from a center of the pad to the edge, (col. 6, lines 8-10), Cheng further teaches that the slurry solution can be uniformly spread on the top surface of the pad, which encompasses the most center portion, and along an area from the circumference of the polishing surface, (col. 7, lines 25-28). The Examiner also notes that this is performed while the pad is rotating, because Cheng teaches that the invention is an improvement over conventional CMP operations in which the slurry is dispensed while the pad is rotating, (col. 3, lines 27-30). The Examiner further notes that the Applicant argues that the arm, 40, of Tolles does not teach providing was water to the axis of the pad. Tolles was cited to teach dispensing a slurry or wash solution during polishing.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Shantese McDonald/

Conferees:

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Boyer Ashley

/Boyer D. Ashley/

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